

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (canceled)

1       Claim 11 (currently amended): Sensor for transmission  
2       measurement in a washing machine or dishwasher, the  
3       sensor comprising:

4            - a carrier to which a transmitter is attached for  
5       emitting a transmitter beam, and to which a receiver is  
6       attached to receive radiation from the transmitter;  
7       wherein the carrier comprises a first leg to which the  
8       transmitter is attached and a second leg to which the  
9       receiver is attached opposite the transmitter, and

10           - a diaphragm system arranged separate from the  
11      carrier and spaced from the transmitter, the diaphragm  
12      system including ~~[[comprising]]~~ a first diaphragm opening  
13      and a second diaphragm opening, both the first diaphragm  
14      opening and the second diaphragm opening being arranged  
15      in a path of the transmitter beam in order to induce  
16      ~~[[generate]]~~ a measurement beam generated by the  
17      transmitter to be directed to the receiver, wherein the  
18      first diaphragm opening is arranged adjacent to, but  
19      spaced from, the transmitter and the second diaphragm  
20      opening is arranged adjacent to, but spaced from, the  
21      receiver in the beam path of the transmitter beam such  
22      that the first and second diaphragms define a fluid  
23      spacing for the measurement beam passing therethrough for  
24      measuring the transmission properties of the fluid  
25      therebetween.

1       Claim 12 (currently amended): Sensor for transmission  
2       measurement in a washing machine or dishwasher, the  
3       sensor comprising:

4            - a carrier to which a transmitter is attached for  
5       emitting a transmitter beam, and to which a receiver is  
6       attached to receive radiation from the transmitter,  
7       wherein the carrier comprises a first leg to which the  
8       transmitter is attached and a second leg to which the  
9       receiver is attached opposite the transmitter, and

10           - a diaphragm system arranged separate from the  
11       carrier and spaced from the receiver, wherein the  
12       diaphragm system includes [[comprises]] a first diaphragm  
13       opening and a second diaphragm opening, both the first  
14       diaphragm opening and the second diaphragm opening being  
15       arranged in a path of the transmitter beam to induce the  
16       alignment of [[generate]] a reception beam [[aligned]] to  
17       the receiver, wherein the first diaphragm opening is  
18       arranged adjacent to, but spaced from, the transmitter  
19       and the second diaphragm opening is arranged adjacent to,  
20       but spaced from, the receiver in the beam path of the  
21       transmitter beam such that the first and second  
22       diaphragms define a fluid spacing for the measurement  
23       beam passing therethrough for measuring the transmission  
24       properties of the fluid therebetween.

1       Claim 13 (currently amended): Sensor for transmission  
2       measurement in a washing machine or dishwasher, the  
3       sensor comprising:

4            - a carrier to which a transmitter is attached  
5       for emitting a transmitter beam, and to which a receiver  
6       is attached to receive radiation from the transmitter,  
7       wherein the carrier comprises a first leg to which the

8 transmitter is attached and a second leg to which the  
9 receiver is attached opposite the transmitter, and  
10 - a diaphragm system arranged separate from the  
11 carrier and spaced from the transmitter and the receiver,  
12 the diaphragm system including [[comprising]] a first  
13 diaphragm opening in the beam path of the transmitter  
14 beam to define [[generate]] a measurement beam aligned to  
15 the receiver, and including [[comprising]] a second  
16 diaphragm opening in a path of the transmitter beam to  
17 induce the alignment of [[generate]] a reception beam  
18 [[aligned]] to the receiver, wherein the first diaphragm  
19 opening is arranged adjacent to, but spaced from, the  
20 transmitter and the second diaphragm opening is arranged  
21 adjacent to, but spaced from, the receiver in the beam  
22 path of the transmitter beam such that the first and  
23 second diaphragms define a fluid spacing for the  
24 measurement beam passing therethrough for measuring the  
25 transmission properties of the fluid therebetween.

Claim 14 (canceled)

1 Claim 15 (previously presented): Sensor according to  
2 claim 11, wherein the first and second legs are of  
3 different lengths, the sensor further comprising a  
4 temperature sensor arranged on a free end of the longer  
5 leg of the carrier.

Claims 16 and 17 (canceled)

1 Claim 18 (previously presented): Sensor according to  
2 claim 12, wherein the first and second legs are of  
3 different lengths, the sensor further comprising a

4       temperature sensor arranged on a free end of the longer  
5       leg of the carrier.

Claims 19 and 20 (canceled)

1       Claim 21 (previously presented): Sensor according to  
2       claim 13, wherein the first and second legs are of  
3       different lengths, the sensor further comprising a  
4       temperature sensor arranged on a free end of the longer  
5       leg of the carrier.

Claims 22-26 (canceled)

1       Claim 27 (previously presented): The sensor of claim 13  
2       wherein a spacing between the first diaphragm opening and  
3       second diaphragm opening of the diaphragm system is  
4       greater than the space between the diaphragm system and  
5       the transmitter.

1       Claim 28 (previously presented): The sensor of claim 13  
2       wherein a spacing between the first diaphragm opening and  
3       second diaphragm opening of the diaphragm system is  
4       greater than the space between the diaphragm system and  
5       the receiver.

1       Claim 29 (previously presented): The sensor of claim 11  
2       wherein the transmitter has a main lobe and wherein the  
3       diaphragm system screens at least some areas of the main  
4       lobe.

1       Claim 30 (currently amended): The sensor of claim 12  
2       wherein the receiver has a main lobe and wherein the

3 diaphragm system screens at least some areas of the main  
4 lobe. [ [-] ]

1 Claim 31 (previously presented): The sensor of claim 13  
2 wherein the transmitter has a first main lobe, receiver  
3 has a secnd main lobe, and the diaphragm system screens  
4 at least some areas of both the first main lobe of the  
5 transmitter and the second main lobe of the receiver.

1 Claim 32 (new): The sensor of claim 11, wherein the  
2 first diaphragm opening is arranged closer to the  
3 transmitter than to the receiver and the second diaphragm  
4 opening is arranged closer to the receiver than to the  
5 transmitter.

1 Claim 33 (new): The sensor of claim 11, wherein a  
2 distance between the first and second diaphragm opening  
3 is greater than either (A) a distance between the first  
4 diaphragm opening and the transmitter and (B) a distance  
5 between a second diaphragm opening and the receiver.

1 Claim 34 (new): The sensor of claim 11, wherein the  
2 diameter cf the second diaphragm opening is smaller than  
3 the diameter of the first diaphragm opening.

1 Claim 35 (new): The sensor of claim 11, wherein the  
2 diameter cf the second diaphragm opening is larger than  
3 the diameter of the first diaphragm opening.

1 Claim 36 (new): The sensor of claim 11, the sensor  
2 further comprising:

3                   a housing configured to accommodate the  
4                   transmitter, the receiver and the diaphragm system.